. ID IRITAL 23 JUL 2004

(19) World Intellectual Property Organization International Bureau

OMPI

(43) International Publication Date 31 July 2003 (31.07.2003)

PCT

(10) International Publication Number WO 03/061468 A1

(51) International Patent Classification7: A61B 5/0225

(21) International Application Number: PCT/DK03/00041

(22) International Filing Date: 23 January 2003 (23.01.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: PA2002 00121 23 Janu

23 January 2002 (23.01.2002) DK

- (71) Applicant (for all designated States except US): BANG & OLUFSEN MEDICOM A/S [DK/DK]; Gimsinglundvej 20, DK-7600 Struer (DK).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DALGAARD, Torben [DK/DK]; Klintevej 12, DK-7500 Holstebro (DK). JORGENSEN, Niels, Toft [DK/DK]; Haurumvej 11, DK-8723 Løsnig (DK).
- (74) Agent: PATENT TACTICS; George Brock-Nannestad, Resedavej 40, DK-2820 Gentofte (DK).

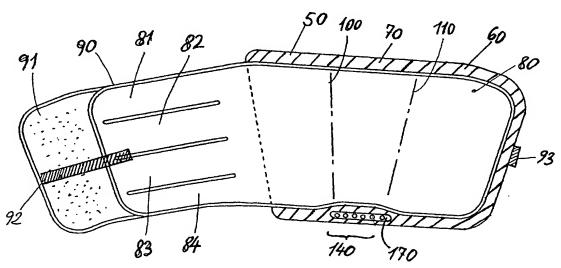
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A BLOOD PRESSURE MEASURING DEVICE WITH A CUFF OF TWO OPENABLE CONCAVE SHELL PARTS



(57) Abstract: Traditional cuffs for measuring blood pressure use an air chamber enclosed in a non-stretchable fabric to occlude an artery in a limb when supplied with pressurised air. A stethoscope used on the limb is used to monitor blood flow. Application of the cuff is inconvenient and correct placement of the stethoscope chestpiece requieres skill. According to the invention blood pressure measurement is facilitated by having the air chamber enclosed in a pre-formed shell like structure being flexible around the limb and stiff along the limb and by using a linear array of microphones to detect the blood flow noises, the best signal from one of the microphones being automatically selected. Furthermore, the invention provides a facility for correcting the reading in dependence of the amount of wrap of the limb.